Serial No.: 10/065,643 Confirmation No.: 5973 Attorney Docket No.: 00173,017.PCUS00

CLAIMS

- 1. (Cancelled)
- 2. (Previously presented) The arrangement as recited in claim 3, wherein said emergency brake (8;
- 8') comprises a parking brake configured to function as said emergency brake (8; 8').

Attorney Docket No.: 00173.017.PCUS00

3. (Previously presented) An arrangement for activating an emergency brake (8; 8') within a

vehicle (1), the function of which is dependent upon a malfunction detection in a regular brake

system of the vehicle, the arrangement comprising:

a first brake circuit and a second brake circuit; and

an emergency brake activation means (16: 24, 25, 26) for activating the emergency brake

(8: 8') if a pressure (p₁) in the first brake circuit simultaneously falls below a first limit value (p₁g)

when a pressure (p2) in the second brake circuit falls below a second limit value (p2G), said

emergency brake activation means (16; 24, 25, 26) comprising a first sensor (20; 20') configured

to detect if pressure (p_1) in the first brake circuit falls below the first limit value (p_{1G}) and a second

sensor (21; 21') configured to detect if pressure (p₂) in the second brake circuit falls below the

second limit value (p_{2G}), the first pressure sensor (20; 20') being connected to a first valve (18)

and configured to assume a first position when the pressure (p1) in the first brake circuit falls

below the first limit value (p1G) and the second pressure sensor (21; 21') being connected to a

second valve (19) and configured to assume a first position when the pressure (p₂) in the second

brake circuit falls below the second limit value (p_{2G}), said first and second valves (18, 19) being

connected to a third valve (23) adapted to assume a position for actuating said emergency brake

(8; 8') when the first valve (17) is in said first position and the second valve (18) is in said first

position.

3

4. (Previously presented) The arrangement as recited in claim 3, further comprising a valve device

(15) for accommodating manual actuation of said emergency brake (8; 8').

5. (Previously presented) The arrangement as recited in claim 3, further comprising a first

electronic control unit (24) to which the first sensor (20') and the second sensor (21') are

connected, said control unit (24) functioning to activate said emergency brake (8; 8')if the first

sensor (20') and the second sensor (21') indicate that the pressure (p1) in the first brake circuit

falls below the first limit value (p_{1G}) and the pressure (p₂) in the second brake circuit falls below

the second limit value (p2G).

6. (Previously presented) The arrangement as recited in claim 5, wherein the first sensor (20')

being connected to the first control unit (24) via a second electronic control unit (25), and the

second sensor (21') being connected to the first control unit (24) via a third electronic control unit

(26), said second control unit (25) and third control unit (26) each functioning to detect whether

the pressure in its associated brake circuit falls below their respective limit values (p_{1G}, p_{2G}), and

by the second control unit (25) and the third control unit (26) being connected to the first control

unit (24) for activation of said emergency brake (8; 8') if the second control unit (25) and the

third control unit (26) indicate that the pressure (p1) in the first brake circuit falls below the first

limit value (p_{1G}) and the pressure (p₂) in the second brake circuit falls below the second limit value

(p_{2G}).

4

Attorney Docket No.: 00173.017.PCUS00

7 - 12. (Cancelled).

13. (Previously presented) A method for activation of an emergency brake function within a vehicle in dependence of whether a regular brake system of the vehicle that includes a first brake

circuit and a second brake circuit is malfunctioning, the method comprising:

providing an arrangement for activating an emergency brake (8; 8') within a vehicle (1). the function of which is dependent upon a malfunction detection in a regular brake system of the vehicle, the arrangement comprising: a first brake circuit and a second brake circuit; and an emergency brake activation means (16; 24, 25, 26) for activating the emergency brake (8; 8') if a pressure (p₁) in the first brake circuit simultaneously falls below a first limit value (p_{1G}) when a pressure (p2) in the second brake circuit falls below a second limit value (p2G), said emergency brake activation means (16; 24, 25, 26) comprising a first sensor (20; 20') configured to detect if pressure (p1) in the first brake circuit falls below the first limit value (p1G) and a second sensor (21; 21') configured to detect if pressure (p2) in the second brake circuit falls below the second limit value (p2G), the first pressure sensor (20; 20') being connected to a first valve (18) and configured to assume a first position when the pressure (p₁) in the first brake circuit falls below the first limit value (p1G) and the second pressure sensor (21; 21') being connected to a second valve (19) and configured to assume a first position when the pressure (p2) in the second brake circuit falls below the second limit value (p_{2G}), said first and second valves (18, 19) being connected to a third valve (23) adapted to assume a position for actuating said emergency brake

5

Attorney Docket No.: 00173.017.PCUS00

(8, 8') when the first valve (17) is in said first position and the second valve (18) is in said first position;

detecting whether a pressure (p_1) in the first brake circuit is below a first limit value (p_{1G}) ; detecting whether a pressure (p_2) in the second brake circuit is below a second limit value (p_{2G}) ; and

activating of said emergency brake function when the pressure (p_1) in the first brake circuit falls below the first limit value (p_{1G}) at the same time as the pressure (p_2) in the second brake circuit falls below the second limit value (p_{2G}) by blocking off fluid pressure supplied to a pressure-actuated emergency brake.